



**FORM PTO-1449**  
**U.S. DEPARTMENT OF COMMERCE**  
**PATENT AND TRADEMARK OFFICE**

ATTORNEY DOCKET NO.: 10845-150

APPLICATION SERIAL NO.: 10/753,927

GROUP ART UNIT: 2637

APPLICANT: Brent M. Ledvina, et al.

EXAMINER: Temesghen Ghebretinsae

FILING DATE: January 8, 2004

CONFIRMATION NO.: 6773

PRIORITY DATE: January 10, 2003

**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL	DOCUMENT NO.	DATE	NAME	CLASS/SUB- CLASS	FILING DATE IF APPROPRIATE
<i>EL</i>	6,407,699*	06/18/02	Yang	342/357.12	04/14/00

**FOREIGN PATENT DOCUMENTS**

EXAMINER INITIAL	DOCUMENT NO.	DATE	NAME	CLASS/SUB -CLASS	TRANSLATION YES NO

**OTHER DOCUMENTS**

(Including Author, Title, Date, Pertinent Pages, etc.)


\* These patents are representative of the state of the art but published after or less than one year prior to Applicant's priority date. Therefore, if any such item is considered sufficiently relevant by the Examiner to the present invention, its possible "prior art" status against the present invention should be considered individually allowing for the prospect of swearing back or other priority determination.

**EXAMINER****DATE CONSIDERED**

PTO-Form 1449

**FORM PTO-1449**  
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



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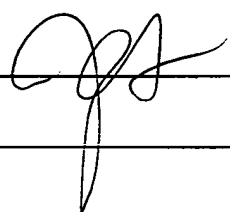
1.	<i>Real-Time GPS Software Radio Receiver</i> , Akos et al., ION NTM 2001, 22-24 January 2001, Long Beach, CA, pp. 809-816.
2.	<i>Global Positioning System Software Receiver (gpSrx) Implementation in Low Cost/Power Programmable Processors</i> , Akos et al., ION GPS 2001, 11-14 September 2001, Salt Lake City, UT, pp. 2851-2858.
3.	<i>GPS Receivers</i> , A. J. Van Dierendonck, <i>Global Positioning System: Theory and Applications</i> , B. W. Parkinson and J. J. Spilker, Jr., Eds., vol. I, American Institute of Aeronautics and Astronautics, 1996, Chapter 8, pp. 329-406.
4.	<i>A Coming of Age for GPS: A RTLinux BASED GPS RECEIVER</i> , Ledvina et al., <i>Proceedings of the Workshop on Real Time Operating Systems and Applications and Second Real Time Linux Workshop</i> (in conjunction with IEEE RTSS 2000), November 27-28, 2000**, see <a href="http://gps.ece.cornell.edu/index.html">http://gps.ece.cornell.edu/index.html</a> .

5. 	<i>The New L2 Civil Signal</i> , R.D. Fontana et al., Proceedings of the ION GPS 2001, September 11-14, 2001, Salt Lake City, UT, pp. 617-631, see <a href="http://www.findarticles.com/cf_dls/m0BPW/9_12/78573899/p8/article.jhtml?term=">http://www.findarticles.com/cf_dls/m0BPW/9_12/78573899/p8/article.jhtml?term=</a> .
6.* 	<i>A 12-Channel Real-Time GPS L1 Software Receiver</i> , B. M. Ledvina et al., Proceedings of the ION National Technical Meeting, January 22-24, 2003**, Anaheim, CA, see <a href="http://gps.ece.cornell.edu/index.html">http://gps.ece.cornell.edu/index.html</a> .
7.* 	<i>Bit-Wise Parallel Algorithms for Efficient Software Correlation Applied to a GPS Software Receiver</i> , B.M. Ledvina et al., to appear in the IEEE Transactions on Wireless Communications, 2003.
8.* 	<i>Design and Practical Implementation of Multi-Frequency RF Front Ends Using Direct RF Sampling</i> , M.L. Psiaki et al., Preprint from ION GPS/GNSS 2003.
9. 	<i>Design and Implementation of a Direct Digitization GPS Receiver Front End</i> , D.M. Akos, IEEE Transactions on Microwave Theory and Techniques, Vol. 44, No. 12, 12/96.
10. 	<i>A High-Performance Real-Time GNSS Software Receiver and its Role in Evaluating Various Commercial Front End ASICs</i> , Jona Thor, ION GPS 2002, 24-27 September, 2002, pp 2554-2560.
11. 	U.S. Provisional Application Serial No. 60/439,391 filed January 10, 2003. Title: Real-Time Software Receiver. Applicants: Brent M. Ledvina et al.

\* These patents are representative of the state of the art but published after or less than one year prior to Applicant's priority date. Therefore, if any such item is considered sufficiently relevant by the Examiner to the present invention, its possible "prior art" status against the present invention should be considered individually allowing for the prospect of swearing back or other priority determination.

\*\*Date substantiated by inventors.

EXAMINER



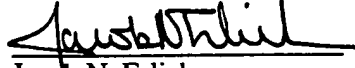
DATE CONSIDERED

3/8/05



**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this date: November 30, 2004.

  
Jacob N. Erlich  
Reg. No. 24,338

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicant(s): Brent M. Ledvina, et al.  
Application Serial No. 10/753,927  
Filed: January 8, 2004  
Title: REAL-TIME SOFTWARE RECEIVER

Confirm. No. 6773  
Group Art Unit: 2637  
Examiner: Temesghen Ghebretinsae

PERKINS SMITH & COHEN LLP  
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Boston, MA 02108  
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To: Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

Sir:

This Information Disclosure Statement (Form PTO-1449) is submitted under 37 CFR 1.97(e)(1), including a copy of the cited reference. Each item of information contained in this information disclosure statement was cited in a communication from a foreign patent office (PCT Receiving Office/US) in a counterpart foreign application no more than three months prior to the filing of this information disclosure statement. The reference was cited in an International Search Report dated November 16, 2004 for the corresponding PCT application (copy enclosed).

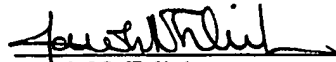
In view thereof, no fee is required. If the payment of a fee is deemed necessary, please charge such fee to Deposit Account No. 03-2410, Order No. 10845-150.

The following information is presented in the event that a call may be deemed desirable by the Examiner:

JACOB N. ERLICH (617) 854-4000.

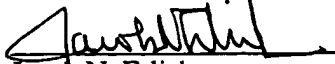
Respectfully submitted,  
Brent M. Ledvina, et al., Applicants

Dated: November 30, 2004

By:   
Jacob N. Erlich  
Reg. No. 24,338  
Attorney for Applicants

**CERTIFICATE OF EXPRESS MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service via Express Mail Label No. EL449702124US, addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on January 8, 2004.

  
Jacob N. Erlich  
Reg. No. 24,338

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

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Application Serial Number: N/A  
Filed: Herewith  
For: REAL-TIME SOFTWARE RECEIVER

Examiner: N/A  
Group Art Unit: N/A

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One Beacon Street  
Boston, MA 02108  
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To: Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**INFORMATION DISCLOSURE STATEMENT**

Sir:

This Information Disclosure Statement (Form PTO-1449) (including copies of references) is submitted under 37 CFR 1.97(b).

**REMARKS**


Applicant submits herewith an Information Disclosure Statement under 37 CFR 1.97(b).

The following information is presented in the event that a call may be deemed desirable by the Examiner:

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Respectfully submitted,  
Brent M. Ledvina et al., Applicants

Dated: January 8, 2004

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